

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for creating a wire load model, comprising:

creating an interconnect configuration;

running a field solver to generate parasitic information for the interconnect configuration;

storing the parasitic information in an accessible format, wherein the parasitic information comprises capacitance and resistance information; and

running a curve-fitting engine to create the wire load model, wherein running the curve-fitting engine is dependent on the parasitic information, and wherein an area capacitance of the wire load model is determined substantially according to

$$C_a = W \times C_{a0} \times \frac{S}{S + S_a},$$

where C_a represents area capacitance, W represents a width, C_{a0} represents a first order area capacitance, S represents a spacing, and S_a represents an area capacitance spacing.
2. (Original) The method of claim 1, wherein a range of widths and spacings for the interconnect configuration are chosen so that widths and spacings are larger than a minimum width and spacing specification for the interconnect configuration.
3. (Previously Amended) The method of claim 2, wherein the accessible format is a look-up table for the range.

4. (Original) The method of claim 1, wherein the curve-fitting engine is a non-linear curve-fitting engine.
5. (Original) The method of claim 1, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
6. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for creating a wire load model, the method comprising:
 - creating a wire structure;
 - running a field solver to generate parasitic information for the wire structure, wherein the parasitic information comprises capacitance and resistance information;
 - storing the parasitic information in an accessible format; and
 - running a curve-fitting engine to create the wire load model, wherein running the curve-fitting engine is dependent on the parasitic information, and wherein an area capacitance of the wire load model is determined substantially according to
$$C_a = W \times C_{a0} \times \frac{S}{S + S_a},$$
where C_a represents area capacitance, W represents a width, C_{a0} represents a first order area capacitance, S represents a spacing, and S_a represents an area capacitance spacing.

7. (Original) The method of claim 6, wherein a width and a spacing for the wire structure is chosen so that the width and spacing is larger than a minimum width and spacing specification for the wire structure.
8. (Original) The method of claim 6, wherein the accessible format is a look-up table.
9. (Original) The method of claim 6, wherein the curve-fitting engine is a non-linear curve-fitting engine with an error control mechanism.
10. (Original) The method of claim 6, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
11. (Currently Amended) A computer system, comprising:
 - a memory for storing a model of a circuit;
 - a processor for creating a wire load model, wherein the processor establishes an interconnect configuration for the circuit;
 - a field solver for determining parasitic information for the interconnect configuration, wherein the parasitic information comprises capacitance and resistance information; and
 - a curve-fitting engine that uses the parasitic information to generate the

wire load model, wherein an area capacitance of the wire load model is determined substantially according to

$$C_a = W \times C_{a0} \times \frac{S}{S + S_a}, \text{ where } C_a \text{ represents area capacitance, } W$$

represents a width, C_{a0} represents a first order area capacitance, S represents a spacing, and S_a represents an area capacitance spacing.

12. (Previously Amended) The computer system of claim 11, wherein a width and a spacing for the interconnect configuration is chosen so that the width and spacing is larger than a minimum width and spacing specification for the interconnect configuration.
13. (Previously Amended) The computer system of claim 11, wherein the curve-fitting engine is a non-linear curve-fitting engine.
14. (Previously Amended) The computer system of claim 11, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
15. (Currently Amended) A method for creating a wire load model, comprising:
 - creating an interconnect configuration;
 - generating parasitic information for the interconnect configuration,
 - wherein the parasitic information comprises capacitance and resistance information;

storing the parasitic information in an accessible format; and
creating the wire load model dependent on the parasitic information,
wherein an area capacitance of the wire load model is determined
substantially according to $C_a = W \times C_{a0} \times \frac{S}{S + S_a}$, where C_a
represents area capacitance, W represents a width, C_{a0} represents a
first order area capacitance, S represents a spacing, and S_a
represents an area capacitance spacing.

16. (Original) The method of claim 15, wherein generating parasitic information uses a field solver.
17. (Original) The method of claim 15, wherein creating the wire load model uses a non-linear curve-fitting engine.
18. (Original) The method of claim 15, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
19. (Currently Amended) A wire load model creation tool, comprising:
 - means for creating an interconnection configuration for a structure;
 - means for field solving the interconnect configuration to determine parasitic information, wherein the parasitic information comprises capacitance and resistance information;

means for storing the parasitic information;

curve-fitting means for curve-fitting the parasitic information and using interconnect configuration parameters to create a wire load model, wherein an area capacitance of the wire load model is determined

substantially according to $C_a = W \times C_{a0} \times \frac{S}{S + S_a}$, where C_a

represents area capacitance, W represents a width, C_{a0} represents a

first order area capacitance, S represents a spacing, and S_a

represents an area capacitance spacing; and

means for controlling error in the curve-fitting means.

20. (Previously Added) The method of claim 1, wherein the interconnect configuration is non-symmetrical.